

In re: Chockalingam Arunachalam

Filed: August 30, 2001

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REMARKS

This is in response to the office action dated October 3, 2002. Reconsideration is requested.

Claims 1-19 were filed with the present application on August 30, 2001 and are currently pending. The examiner apparently only examined and rejected claims 1-18. If the examiner does not consider independent claim 19 allowable, applicant submits it would be improper to issue a final office action in response to this amendment.

"Claim 14 is rejected because of the following formalities: The term "too" should be spelled as "to". Appropriate correction is required."

"Too" has been amended to --to--.

"Claims 1, 8, 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "outside" is not clearly defined."

This rejection is respectfully traversed. This rejection is not understood. Clarification is requested. To the extent the rejection is understood, the term "outside" is defined and used

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consistently throughout the specification. If necessary, an appropriate amendment will be provided once clarification is received.

"Claims 1, 8, 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "a portion" is not clearly defined."

This rejection is respectfully traversed. This rejection is also not understood. Clarification is requested. To the extent this rejection is understood, the term "portion" is being used according to its ordinary and customary meaning. If necessary, an appropriate amendment will be provided once clarification is received.

"Claim 7 is rejected under 35 U.S.C., first paragraph as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The phrase "voice response unit includes said voice path switch" of claim 7 is not disclosed by the specification. On item 16 (voice path switch) and item 18

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(voice response unit) of Fig. 2 of the specification show two different entities and there is no inclusion relationship between the two units."

Support for claim 7 is provided at page 4, paragraph 8 and page 9, paragraph 24.

"Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Morganstein (US-PAT-NO: 5,309,504)."

Claims 16-18 are rejected under 35 USC 103(a) as obvious over Morganstein in view of Kennedy et al.

None of the cited art discloses or suggests, as generally required by claims 1-18, as amended, the step of, or the means for populating and properly associating an ANI for each call handled by the IVR not having an ANI (support for the amendment is disclosed at least at page 12, paragraph 31). Morganstein only discloses ANI equipment for identifying the calling party (col. 3, lines 50 et seq.). Kennedy et al. similarly does not disclose or suggested this claimed feature.

For all the above reasons, claims 1-18, as amended, and claim 19 are allowable over the cited art. Allowance of these claims is therefore requested.

Attached hereto is a marked-up version of the changes made to


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the specification and claims by the current amendment. The
attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES
MADE."

The examiner is invited to telephone the undersigned,
applicant's attorney of record, to facilitate advancement of the
present application.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1, 8, 9, and 14 have been amended as follows:

1. (Amended) A system for providing interactive data exchange between a plurality of outside parties utilizing a plurality of telephone apparatus and a call center including an interactive voice response unit (IVR), at least one operator terminal, and at least one database, said system responsive to telephone signals received from said plurality of telephone apparatus, for converting at least a portion of said received telephone signals into data signals, said data signals facilitating interactive data exchange between each of said plurality of outside parties utilizing said plurality of outside telephone apparatus and said at least one database, said IVR providing human recognizable audio output signals to said plurality of outside parties in response to data provided by said at least one data base and said telephone signals received from said plurality of outside telephone apparatus, and for storing a plurality of interactive data exchange records, each of said interactive data exchange records representing at least a portion of the interactive data exchange between one of said plurality of

outside parties and said at least one data base, said system comprising:

a voice path switch, responsive to said IVR and to said telephone signals, for selectively connecting said telephone signals received from said plurality of outside parties utilizing said plurality of outside telephone apparatus to at least one of said operator terminals and said IVR dependent upon whether operator assistance is required for each of said plurality of outside parties;

means for populating an automatic number identifier (ANI) for each outside call handled by said IVR not having an ANI and associating said ANI therewith;

a voice response unit interface for receiving ~~an~~the automatic number identifier (ANI) for each outside call handled by said IVR along with at least a portion of said plurality of interactive data exchange records exchanged between said outside party and said IVR, said voice response unit interface including memory for storing said received interactive data exchange records and a lookup table for storing each said received ANI associated with each outside call handled by said IVR;

at least one queue, for storing at least calls handled by

said IVR; and

a data controller, responsive to said queue and said voice response unit interface, for identifying an ANI for each call identified in said specified queue, for comparing each said identified ANI with the ANIs stored in the voice response unit interface lookup table, for retrieving said collected data associated with an ANI stored in said voice response unit interface, and for providing said retrieved data to at least one operator terminal assigned to handle said outside call.

8. (Amended) A method of providing interactive data exchange between a plurality of outside parties utilizing a plurality of telephone apparatus, a voice response system, at least one operator terminal, and at least one database, said method comprising the steps of:

connecting an outside telephone apparatus to an interactive voice response unit (IVR) and receiving telephone signals, at said IVR, from said plurality of outside telephone apparatus and for converting at least a portion of said received telephone signals into data signals, said data signals facilitating interactive data exchange between each of said plurality of outside parties

utilizing said plurality of outside telephone apparatus and said at least one database;

providing human recognizable audio output signals by said IVR to said plurality of outside parties in response to data provided by said at least one data base and said telephone signals received from said plurality of outside telephone apparatus;

storing a plurality of interactive data exchange records, each of said interactive data exchange records representing at least a portion of the interactive data exchange between one of said plurality of outside parties and said at last one data base;

selectively connecting said telephone signals received from said plurality of outside parties utilizing said plurality of outside telephone apparatus to at least one of said operator terminals and said voice response unit dependent upon whether operator assistance is required for each of said plurality of outside parties;

populating an automatic number identifier for each outside call handled by the IVR not having an ANI and associating said ANI therewith;

receiving ~~an~~the automatic number identifier (ANI) for each outside call handled by said IVR along with at least a portion of

said plurality of interactive data exchange records exchanged between said outside party and said IVR;

storing said received interactive data exchange records in a voice response unit interface memory, including a lookup table for storing each said received ANI associated with each outside call handled by said IVR;

holding calls handled by said IVR in at least one queue until a voice path is established between a held call and at least one operator terminal;

identifying an ANI for each call held in said specified queue and comparing each said identified ANI with the ANIs stored in the voice response unit interface lookup table; and

retrieving said collected data associated with a stored ANI, and for providing said retrieved data to said at least one operator terminal assigned to handle said outside call.

9. (Amended) A system for providing interactive data exchange between an outside party making a telephone call and a call center, comprising:

means for populating an Automatic Number Identifier (ANI) for an incoming telephone call having no ANI associated therewith and

associating said ANI therewith;

means for identifying ~~an~~the Automatic Number Identifier (ANI) associated with an incoming telephone call;

means for selectively connecting the incoming telephone call to an interactive voice response unit (IVR) and a voice path switch;

a data switch controller;

an IVR in communication with ANI means and including means for receiving a telephone signal from an incoming telephone call;

a database capable of generating data signals, in communication with the IVR;

an IVR interface in communication with the IVR and to the data switch controller, the IVR interface comprising a memory for storing at least a portion of the data signals and a lookup table for storing the ANI;

an operator terminal in communication with the data switch controller;

a voice path switch in communication with the operator terminal, the IVR, the ANI means, and the data switch controller and responsive to the data switch controller for switching calls between the IVR and the operator terminal.

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14. (Amended) The system of claim 9 wherein the voice path switch comprises a queue for holding the telephone call prior ~~to~~ transferring the call to the operator terminal.